

Application No.: 10/624,208
Amendment

specialized scalar and vector processor programmed instructions. Since we know $wx = d0\ d4\ e0\ e4\ d1\ d5\ e1\ e5$ we can find $yz = d2\ d6\ e2\ e6\ d3\ d7\ e3\ e7$ by combination and substitution using the ECC equations of Figure 2 item 210. [The plus sign, +, denotes the exclusive-or boolean logic operator, d are binary data bits and e are binary ECC bits]. To evaluate couplet wx we use only the wx terms of the column evaluation logic terms listed above. IDC-a22,AMD,M

~~Please replace the paragraph beginning at page 33, line 26 with the following:~~

Once the data packet exits the CRC Checker, item 705, it is buffered in the Data Buffer In logic block, item ~~200~~700. If no data packet CRC error is detected at the node input the buffered data packet can be moved into the node, item 760. Here again it is prudent to reverify the CRC as the data packet can possibly be corrupted in the buffering process. The data passes from data buffer, item 700 to the node, item 760, through the second CRC Checker, item 730. If a CRC error is detected the Message Control In logic block, item 715, is again signaled to reply to the transmitting node with a NACK signal. A CRC error occurring at either CRC Checker will flag the data packet to be in error at the node, item 760. If no CRC errors have been detected the Message Control In logic block, item 715 ~~replies~~ to the transmitting node with an Acknowledge signal. IDC-a23,AMD

~~Please replace the paragraph beginning at page ³⁴33, line 14 with the following:~~

The explanation block ~~790~~795 details the encoding of ACK and NACK signals. Effectively there is no special encoding at this level, an active ACK line translates as an ACK and an active NACK line translates as a NACK. Setting both ACK and NACK is not applicable and disallowed. IDC-a24,AMD

~~Please replace the paragraph beginning at page 35, line 29 with the following:~~

Figure 10 shows that byte 0 of data packet [D] 1000 is received with bit 5 picked; '81' hexadecimal has become 'A1' hexadecimal. The ECC value for 'A1' is found by evaluation using the equations of Figure 2C item 210 or from Table 2 as 'F8' hexadecimal. The ECC packet [E] 1010 byte 0 read is '57' hexadecimal. Subtracting '57' hexadecimal from 'F8' hexadecimal using the binary exclusive-or operator we get the ECC syndrome 'AF' hexadecimal. From Table 5 IDC-a25,AMD,M